

LARP Document Database

- Vladimir has asked me to implement this ASAP.
- I meet with Lynn Garren in CD tomorrow to initiate the process.
- We will have to deal with “certificates” (don’t ask). This is added security to protect against posting of inappropriate material.
- This is initially for “Accelerator Systems” part of LARP but can be easily extended to the rest of LARP.
- I will make a draft plan for topics, etc and circulate it. (I already have some suggestions from Elliott McCrory and Mike Syphers.)
- LARP-centric, not FNAL-centric.

Report on CERN Visit June 11-June 25, 2005

Jean Slaughter
FNAL LARP Meeting
July 18, 2005

Activities - I

- Investigated logistical issues for commissioning work
 - ID cards, visas, housing, cars, cost of living adjustments, medical insurance, etc.
 - Major contact – Tami Kramer from CMS
 - Detailed report
- Accompanied Erik Gottschalk for 2 days talking with people about LHC@FNAL center
http://docdb.fnal.gov/CMS/DocDB/0002/000272/001/CERN_News_June30_v1.pdf
 - Positive response
 - CERN AD is doing its own internal review of the idea
 - Totally accepted for CMS

Activities - II

- Discussions with many people to elaborate on the “Roger Bailey List” of suitable collaborative projects – more on this later.
- Attended a number of meetings related to commissioning
- Toured magnet testing facility, CMS detector, Atlas assembly area, new CCC building.
- Took the general CERN safety course

Observations and Suggestions - I

- What CERN wants is our brainpower to help solve current and future problems.
- We need to respect the CERN concern about firm commitments that they can count on.
- Now is the time to get involved
 - Form teams on a few well chosen projects
 - Make the contacts and start – intelligent mix of trips, video conferencing, email, etc.
 - Best to be involved from the beginning on things
- Start placing people at CERN for long term visits by early next year. They should be willing to act as liasons for people at FNAL.
- Future trips should concentrate on actual projects – we need to start doing “real work”.

Observations and Suggestions - II

- LHC@FNAL has the potential to really expedite collaboration – push for a prototype as soon as possible.
- Logistics
 - Arrange with CMS for access to Tami Kramer's office.
 - Clarify user ID cards vs. visitor ID's
 - Get an account for purchases at CERN
 - See if it's possible to get computer accounts and CVS access without going to CERN
- Computer security for the LHC is a major concern.

Realistic Projects - I

- Advice on technology choice and implementation of “Sequencer”.
- Developing and then using a tool for investigating the optimum collimator deployment scheme.
- Detecting and correcting beta beating.

<http://docdb.fnal.gov/CMS/DocDB/0001/000178/002/Scenarios%20Beta%20Beating.pdf>. Is the work Eliana is doing on TBT applicable?

- Review machine protection logic.
- Collaborate on post-mortem project – what to save, how to look at the data, attend workshop in the fall

Realistic Projects - II

- Luminosity - How to use the luminosity detectors, calculating from beam characteristics, figuring out how to optimize, correlating with experiments, etc.
- Learn about applications – make simple modification to the lattice display program. This is important practice for accessing data and database information.
- Review the application base.
- Adapt StorePhysics java library to LHC – step towards SDA and super table
- Are our machine modeling codes and lattice determination codes applicable?

Some suggestions for fall trip(s)

- Start real work on some of the projects
 - Example – post-mortem workshop)
- Investigate longitudinal devices
- Visit the actual housing office. Clarify the ID card type.
- Talk with Ronny Billen about associating stored data with events, essential for SDA in the global sense of SDA.
- Experiment with applications in the micro-control room (way to review application base?).
- Is there any way for us to have input into CERN network security issues? (Computer Division help here?)